

IN THE CLAIMS:

1-2. (canceled)

3. (presently amended) A composition comprising a charge tag attached to a terminal end of a nucleic acid molecule, said charge tag comprising a phosphate group and a positively charged moiety, wherein said charge tag further comprises a dye, and ~~The composition of Claim 2,~~ wherein said dye is positioned between said nucleic acid and said positively charged moiety.

4-8. (canceled)

F1 9. (presently amended) ~~The composition of Claim 2,~~ A composition comprising a charge tag attached to a terminal end of a nucleic acid molecule, said charge tag comprising a phosphate group and a positively charged moiety, wherein said charge tag further comprises a dye, and wherein said nucleic acid molecule comprises a sequence complementary to a target nucleic acid, and wherein said charge tag further comprises one or more nucleotides that are not complementary to said target nucleic acid.

10. (presently amended) ~~The composition of Claim 2,~~ A composition comprising a charge tag attached to a terminal end of a nucleic acid molecule, said charge tag comprising a phosphate group and a positively charged moiety, wherein said charge tag further comprises a dye, and wherein said nucleic acid comprises a first portion complementary to a target nucleic acid and a second portion that is not complementary to said target nucleic acid, wherein said second portion comprises said terminal end.

11-16. (canceled)

17. (presently amended) ~~The composition of Claim 2,~~ A composition comprising a charge tag attached to a terminal end of a nucleic acid molecule, said charge tag comprising a phosphate group and a positively charged moiety, wherein said charge tag further comprises a dye, and wherein said charge tag further comprises a positively charged phosphoramidite.

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18-22. (canceled)

23. (previously amended) A composition comprising a positively charged phosphoramidite, wherein said phosphoramidite comprises an ammonium group.

24. (canceled)

25. (previously amended) A composition comprising a positively charged phosphoramidite, wherein said phosphoramidite has the structure:



wherein, X is a reactive phosphate group and Y is a protected hydroxyl group.

26-38. (canceled)

39. (presently amended) A composition comprising a fluorescent dye directly bonded to a phosphate group, wherein said phosphate group is directly bonded to an amine group, wherein said composition comprises a charge tag, and wherein said fluorescent dye is contained within said charge tag, and ~~The composition of Claim 38~~, wherein said fluorescent dye comprises Cy3.

40. (original) A mixture comprising a plurality of oligonucleotides, each oligonucleotide attached to a different charge tag, each of said charge tags comprising a phosphate group and a positively charged moiety.

41. (original) The mixture of Claim 40, wherein said plurality of oligonucleotides comprises four or more oligonucleotides, each attached to a different charge tag.

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42. (original) The mixture of Claim 40, wherein said plurality of oligonucleotides comprises ten or more oligonucleotides, each attached to a different charge tag.

43. (original) The mixture of Claim 40, wherein said plurality of oligonucleotides comprises twenty or more oligonucleotides, each attached to a different charge tag.

44. (original) The mixture of Claim 40, wherein said plurality of oligonucleotides comprises fifty or more oligonucleotides, each attached to a different charge tag.

45. (original) The mixture of Claim 40, wherein said charge tags comprise a dye.

46. (original) The mixture of Claim 40, wherein said charge tags comprise a second positively charged moiety.

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47. (original) The mixture of Claim 40, wherein said charge tags further comprise one or more nucleotides.

48. (original) The mixture of Claim 40, wherein each of said oligonucleotides attached to a charge tag have a combined net neutral charge and wherein said charge tag has a net positive charge.

49. (renumbered from a duplicate original claim 48) The mixture of Claim 40, wherein each of said oligonucleotides attached to a charge tag have a combined net negative charge and wherein said charge tag has a net positive charge.

50. (renumbered from original claim 49) The mixture of Claim 40, wherein said charge tags comprise a positively charged phosphoramidite.

51. (renumbered from original claim 50) The mixture of Claim 40, wherein said charge tags comprise a neutral phosphoramidite.

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51-85. (canceled)

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86. (new) The composition of Claim 9, wherein said dye is positioned between said nucleic acid and said positively charged moiety.

~~88~~
87. (new) The composition of Claim 9, wherein said charge tag has a net positive charge of 1 at pH 6-10.

~~89~~
88. (new) The composition of Claim 9, wherein said charge tag has a net positive charge of 2 at pH 6-10.

~~90~~
89. (new) The composition of Claim 9, wherein said nucleic acid and said charge tag have a combined net neutral charge and wherein said charge tag has a net positive charge.

~~91~~
90. (new) The composition of Claim 9, wherein said nucleic acid and said charge tag have a combined net negative charge and wherein said charge tag has a net positive charge.

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91. (new) The composition of Claim 9, wherein said charge tag contains a tertiary amine.

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92. (new) The composition of Claim 9, wherein said charge tag contains an ammonium group.

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